

# Residential Package Unit Cooling / Gas Heat Start-Up Sheet

Proper start-up is critical to customer comfort and equipment longevity

Start-Up Date	<input style="width: 95%;" type="text"/>	Company Name	<input style="width: 95%;" type="text"/>	Start-Up Technician	<input style="width: 95%;" type="text"/>
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## Owner Information

Name	<input style="width: 95%;" type="text"/>	Address	<input style="width: 95%;" type="text"/>	Daytime Phone	<input style="width: 95%;" type="text"/>
City	<input style="width: 95%;" type="text"/>	State or Province	<input style="width: 95%;" type="text"/>	Zip or Postal Code	<input style="width: 95%;" type="text"/>

## Equipment Data

Unit Model #	<input style="width: 95%;" type="text"/>	Unit Serial #	<input style="width: 95%;" type="text"/>
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## General Information (Check all that apply)

<input type="radio"/> Residential	<input type="radio"/> New Construction	<input type="radio"/> Roof level	<input type="radio"/> Down flow
<input type="radio"/> Commercial	<input type="radio"/> Retrofit	<input type="radio"/> Grade level	<input type="radio"/> Side flow

## Unit Location and Connections (Check all that apply)

<input type="checkbox"/> Unit is level and installed on:	<input type="checkbox"/> Slab	<input type="checkbox"/> Roof curb	<input type="checkbox"/> Duct connections are complete:	<input type="checkbox"/> Supply	<input type="checkbox"/> Return
<input type="checkbox"/> Condensate drain properly connected per the installation instructions	<input type="checkbox"/> Condensate trap has been primed with water				

## Filters

<input type="checkbox"/> Filters installed	Number of filters	<input style="width: 40px;" type="text"/>	Filter size	<input style="width: 40px;" type="text"/>	<input type="radio"/> Filter located inside	<input type="radio"/> Filter located outside
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## Additional Kits & Accessories Installed (Check all that apply)

<input type="checkbox"/> Refrigerant safety kit	<input type="checkbox"/> Low ambient kit	<input type="checkbox"/> Anti-recycle timer	<input type="checkbox"/> Crank case heater	<input type="checkbox"/> Filter frame kit
<input type="checkbox"/> Transformer kit	<input type="checkbox"/> Economizer	<input type="checkbox"/> Roof curb kit	<input type="checkbox"/> Burglar bar kit	<input type="checkbox"/> Hail guard kit
<input type="checkbox"/> Manual fresh air damper kit	<input type="checkbox"/> Motorized fresh air damper kit			

## Electrical Connections & Inspection (Check all that apply)

<input type="radio"/> Single phase	<input type="radio"/> Three phase	<input type="radio"/> 208 volts AC	<input type="radio"/> 230 volt AC	<input type="radio"/> 460 volts AC	<input type="radio"/> 575 volts AC						
<input type="checkbox"/> Inspect wires and electrical connections	<input type="checkbox"/> Transformer wired properly for primary supply voltage		<input type="checkbox"/> Ground connected								
<input type="checkbox"/> Low voltage present at control board "R & C"	Measured voltage "R" and "C" outdoor unit control board <input style="width: 60px;" type="text"/>										
<input type="checkbox"/> Line voltage present at disconnect	Measured voltage "L1 to L2"	<input style="width: 60px;" type="text"/>	"L2 to L3"	<input style="width: 60px;" type="text"/>	"L1 to L3"	<input style="width: 60px;" type="text"/>					
Compressor amperes "L1"	<input style="width: 40px;" type="text"/>	"L2"	<input style="width: 40px;" type="text"/>	"L3"	<input style="width: 40px;" type="text"/>	Total amperes "L1"	<input style="width: 40px;" type="text"/>	"L2"	<input style="width: 40px;" type="text"/>	"L3"	<input style="width: 40px;" type="text"/>
<input type="radio"/> Single stage compressor		<input type="radio"/> Two stage compressor									

## Air Flow Setup / Cooling

<b>Blower Type &amp; Set-Up</b>	<input type="radio"/> ECM	COOL	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
		ADJUST	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
		DELAY	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
	<input type="radio"/> X-13	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
	<input type="radio"/> PSC	<input type="radio"/> Low	<input type="radio"/> Medium Low	<input type="radio"/> Medium	<input type="radio"/> Medium High	<input type="radio"/> High

Supply static (inches of water column)	<input style="width: 95%;" type="text"/>	Supply air dry bulb temperature	<input style="width: 95%;" type="text"/>	Outside air dry bulb temperature	<input style="width: 95%;" type="text"/>
Return static (inches of water column)	<input style="width: 95%;" type="text"/>	Return air dry bulb temperature	<input style="width: 95%;" type="text"/>	Return air wet bulb temperature	<input style="width: 95%;" type="text"/>
Total external static pressure	<input style="width: 95%;" type="text"/>	Temperature drop	<input style="width: 95%;" type="text"/>	Supply air wet bulb temperature	<input style="width: 95%;" type="text"/>

## Refrigerant Charge and Metering Device

<input type="radio"/> R-410A <input type="radio"/> R-22	Data plate - lbs / Oz <input type="text"/>	Suction line temperature <input type="text"/>	Discharge pressure <input type="text"/>
<input type="radio"/> TXV <input type="radio"/> Fixed Orifice	Discharge line temperature <input type="text"/>	Suction pressure <input type="text"/>	Liquid line temperature <input type="text"/>
TXV# / Orifice size <input type="text"/>		Superheat <input type="text"/>	Subcooling <input type="text"/>

## Gas Heat

<input type="radio"/> Single Stage <input type="radio"/> Two Stage	<input type="radio"/> Natural Gas <input type="radio"/> Propane LP (Requires LP Conversion Kit)		
LP Gas Conversion Kit # <input type="text"/>	LP Conversion Kit Installed By <input type="text"/>	Inlet Gas Pressure (w.c.) <input type="text"/>	
Manifold Pressure at 100% Firing Rate (w.c.) <input type="text"/>	Measured BTU/H (Clock Gas Meter Nat Gas) <input type="text"/>	Rated BTU/H <input type="text"/>	
Manifold Pressure / Low Fire Rate (w.c.) <input type="text"/>	Return Air Dry Bulb Temp <input type="text"/>	Supply Air Dry Bulb Temp <input type="text"/>	Temp Rise <input type="text"/>
<input type="checkbox"/> Burner Flame Inspection - Blue flames extending directly into the primary heat exchanger cells			

## Clean Up Job Site

<input type="checkbox"/> Job site has been cleaned, indoor and outdoor debris removed from job site
<input type="checkbox"/> Tools have been removed from unit
<input type="checkbox"/> All panels have been installed

## Unit Operation and Cycle Test

<input type="checkbox"/> Operate the unit through continuous fan cycles from the thermostat, noting and correcting any problems
<input type="checkbox"/> Operate the unit through cooling cycles from the thermostat, noting and correcting any problems

## Owner Education

<input type="checkbox"/> Provide owner with the owner's manual
<input type="checkbox"/> Explain operation of system to equipment owner
<input type="checkbox"/> Explain thermostat use and programming (if applicable) to owner
<input type="checkbox"/> Explain the importance of regular filter replacement and equipment maintenance

## Comments and Additional Job Details